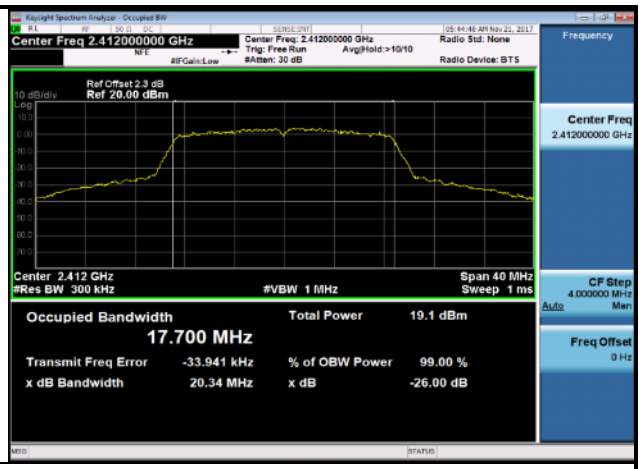
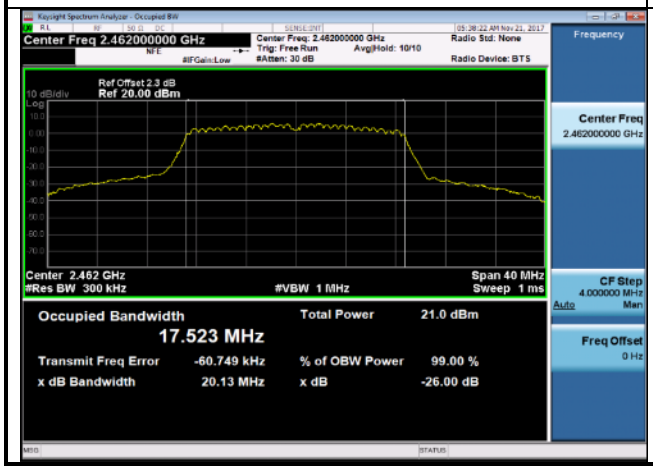
99% Bandwidth：802.11n,2437MHz, ANT 1

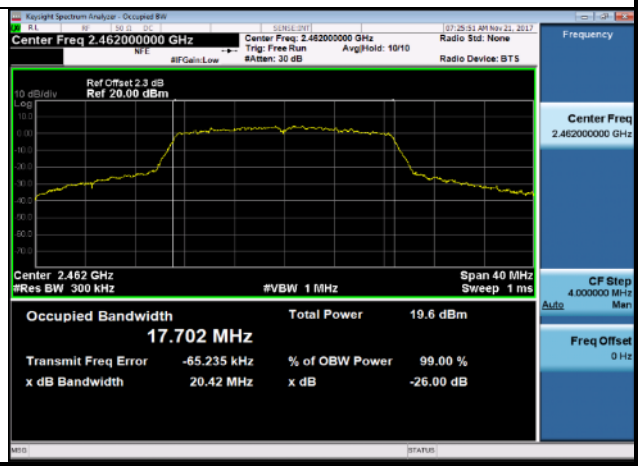


99% Bandwidth：802.11n,2437MHz, ANT 0

99% Bandwidth：802.11n,2462MHz, ANT 1

99% Bandwidth：802.11n,2462MHz, ANT 0





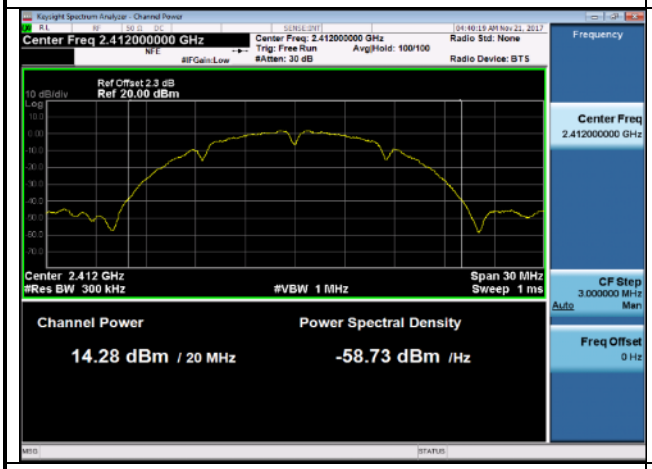
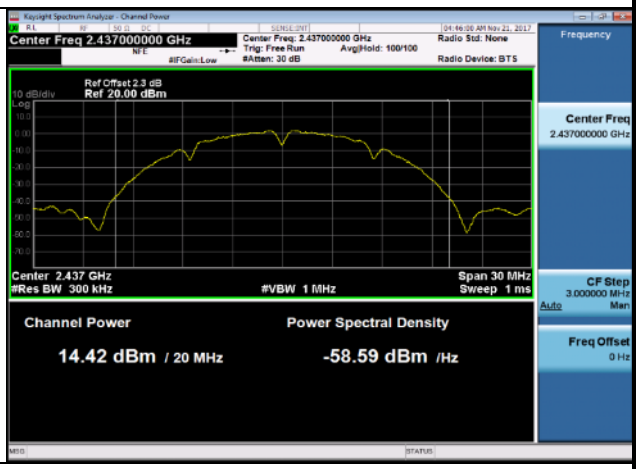
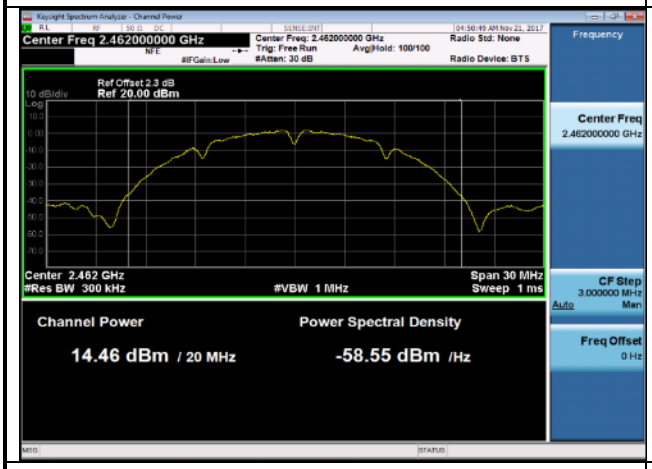
4. Maximum conducted output power and e.i.r.p

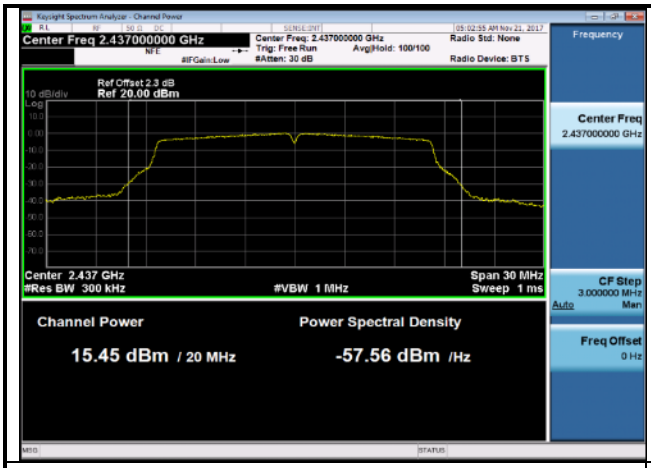
4.1 Test Data

WLAN AVGSA Output Power							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Power (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11b	2412	Ant0	0.00	14.57	15.28	30	Pass
802.11b	2412	Ant1	0.00	15.28			
802.11b	2437	Ant0	0.00	14.80	15.43	30	Pass
802.11b	2437	Ant1	0.00	15.43			
802.11b	2462	Ant0	0.00	15.01	15.42	30	Pass
802.11b	2462	Ant1	0.00	15.42			
802.11g	2412	Ant0	0.10	13.65	14.31	30	Pass
802.11g	2412	Ant1	0.12	14.31			
802.11g	2437	Ant0	0.12	13.99	14.41	30	Pass
802.11g	2437	Ant1	0.10	14.41			
802.11g	2462	Ant0	0.10	14.14	14.38	30	Pass
802.11g	2462	Ant1	0.10	14.38			
802.11n(HT20)	2412	Ant0	0.11	11.45	15.01	30	Pass
802.11n(HT20)	2412	Ant1	0.11	12.48			
802.11n(HT20)	2437	Ant0	0.11	11.71	15.15	30	Pass
802.11n(HT20)	2437	Ant1	0.11	12.53			
802.11n(HT20)	2462	Ant0	0.13	11.87	15.25	30	Pass
802.11n(HT20)	2462	Ant1	0.11	12.58			
802.11n(HT40)	2422	Ant0	0.26	10.01	13.28	30	Pass
802.11n(HT40)	2422	Ant1	0.22	10.52			
802.11n(HT40)	2437	Ant0	0.22	10.07	13.42	30	Pass
802.11n(HT40)	2437	Ant1	0.22	10.73			
802.11n(HT40)	2452	Ant0	0.22	10.11	13.47	30	Pass
802.11n(HT40)	2452	Ant1	0.22	10.78			

Max conducted output power (dBm)	Max antenna gain (dBi)	Max e.i.r.p. (W)	Limit (W)	Result
15.43	3.14	0.072	4	Pass

4.2 Test Plots

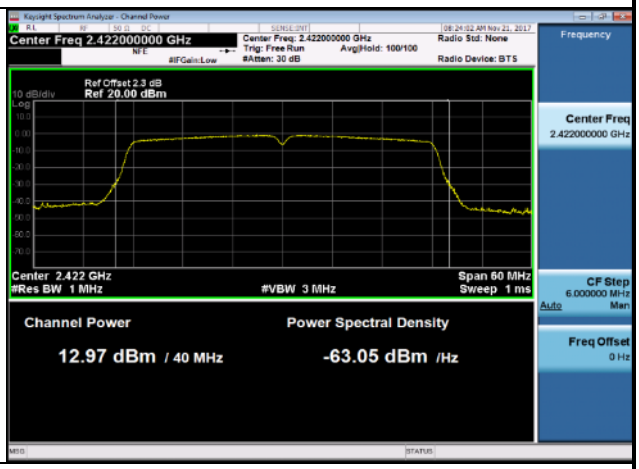
Output Power：802.11b,2412MHz,Ant1	Output Power：802.11b,2437MHz,Ant1
	
Output Power：802.11b,2462MHz,Ant1	Output Power：802.11g,2412MHz,Ant1
	
Output Power：802.11g,2437MHz,Ant1	Output Power：802.11g,2462MHz,Ant1



Output Power：802.11n(40MHz),2422MHz,Ant0

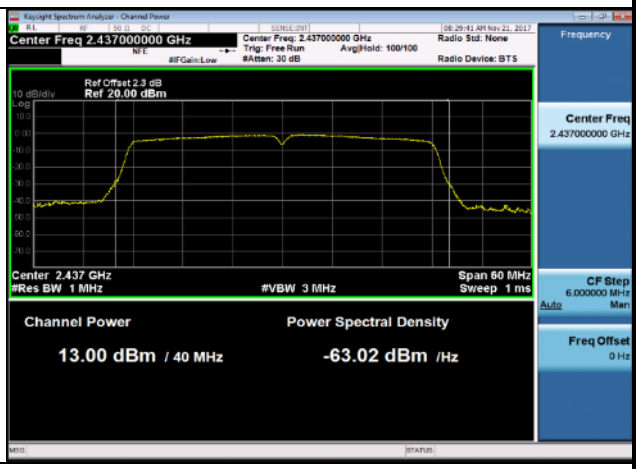
Output Power：802.11n(40MHz),2422MHz,Ant1

Output Power：802.11n(40MHz),2437MHz,Ant0

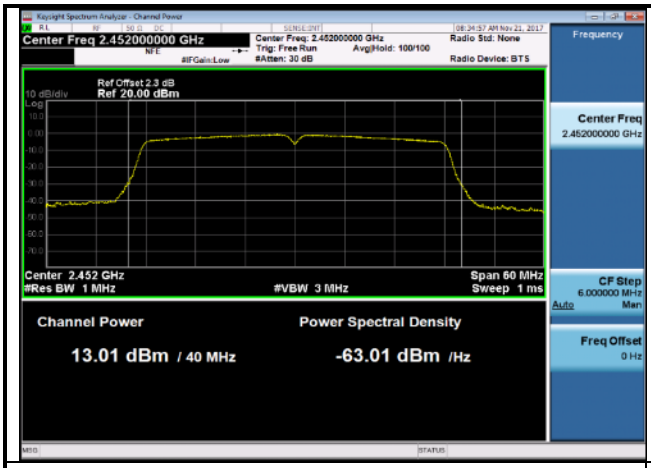


Output Power：802.11n(40MHz),2437MHz,Ant1

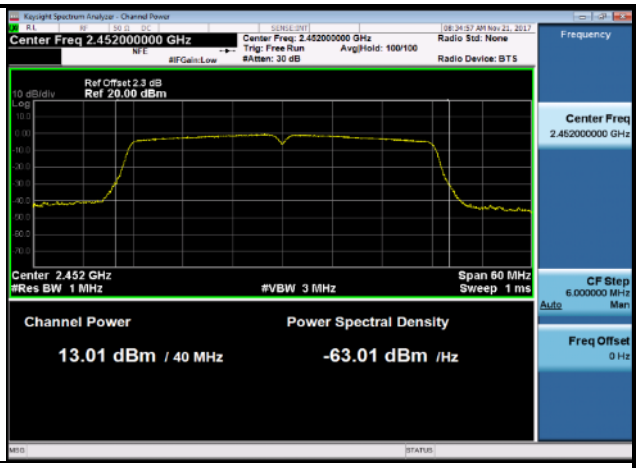
Output Power：802.11n(40MHz),2452MHz,Ant0



Output Power：802.11n(40MHz),2452MHz,Ant1

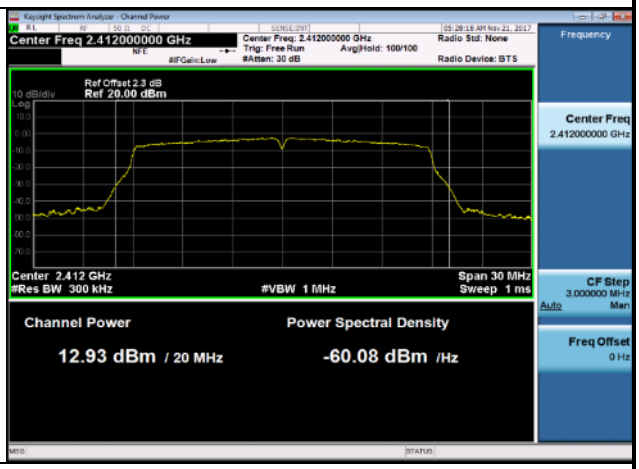


Output Power：802.11n,2412MHz,Ant0

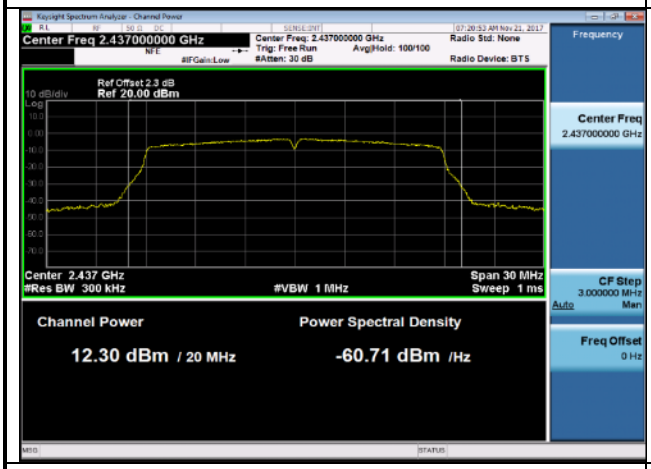


Output Power：802.11n,2412MHz,Ant1

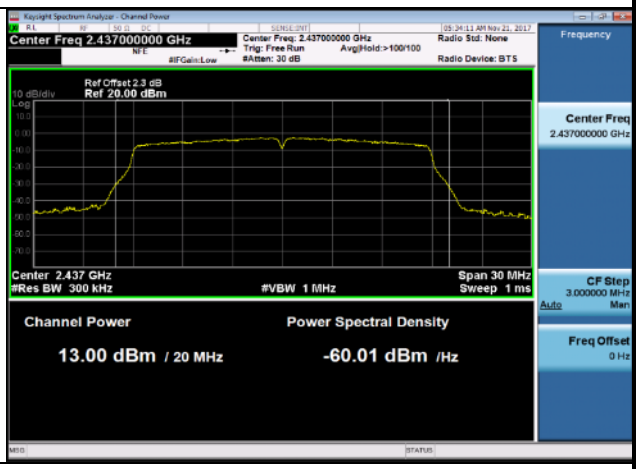
Output Power：802.11n,2437MHz,Ant0



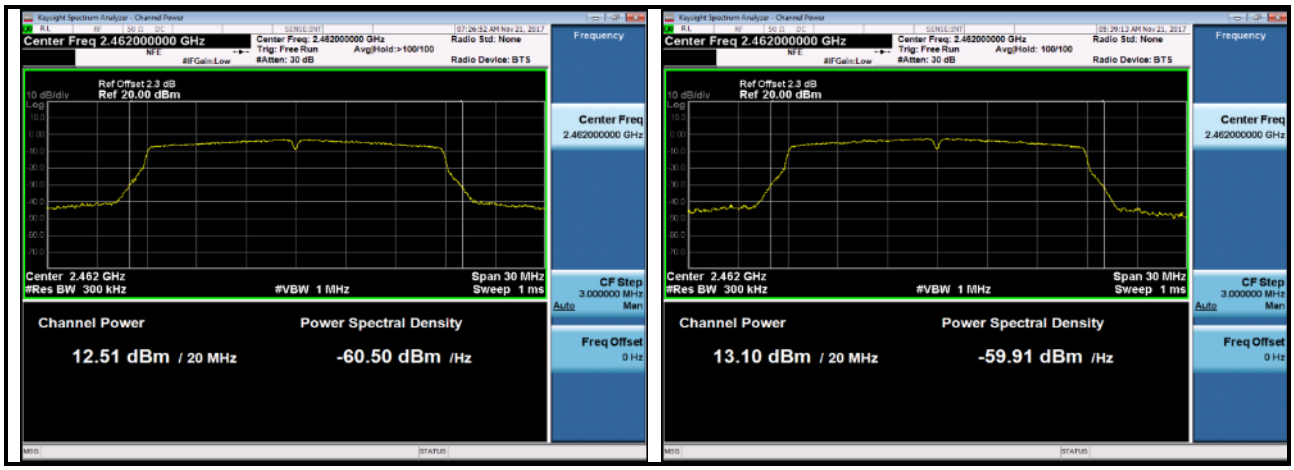
Output Power：802.11n,2437MHz,Ant1



Output Power：802.11n,2462MHz,Ant0



Output Power：802.11n,2462MHz,Ant1


Center Freq 2.462000000 GHz
Ref Offset 2.3 dB
10 dB/div Ref 20.00 dBm
Center 2.462 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 30 MHz
Sweep 1 ms
Channel Power
12.51 dBm / 20 MHz
Power Spectral Density
-60.50 dBm /Hz
Center Freq 2.462000000 GHz
Ref Offset 2.3 dB
10 dB/div Ref 20.00 dBm
Center 2.462 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 30 MHz
Sweep 1 ms
Channel Power
13.10 dBm / 20 MHz
Power Spectral Density
-59.91 dBm /Hz

5. Power spectrum density

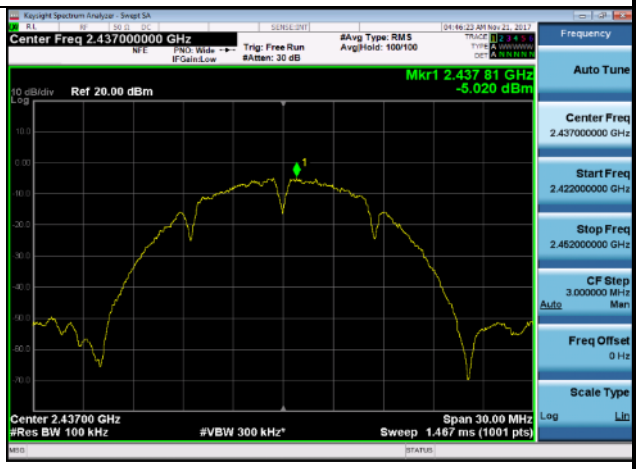
5.1 Test Data

WLAN AVGSA Power Spectral Density							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	PSD (dBm /3kHz)	Total PSD dBm /3kHz)	Limit (dBm /3kHz)	Result
802.11b	2412	Ant0	0.00	-2.104	-1.419	8	Pass
802.11b	2412	Ant1	0.00	-1.419			
802.11b	2437	Ant0	0.00	-1.655	-1.558	8	Pass
802.11b	2437	Ant1	0.00	-1.558			
802.11b	2462	Ant0	0.00	-1.472	-1.002	8	Pass
802.11b	2462	Ant1	0.00	-1.002			
802.11g	2412	Ant0	0.10	-5.162	-4.658	8	Pass
802.11g	2412	Ant1	0.12	-4.658			
802.11g	2437	Ant0	0.12	-4.741	-4.419	8	Pass
802.11g	2437	Ant1	0.10	-4.419			
802.11g	2462	Ant0	0.10	-4.879	-4.169	8	Pass
802.11g	2462	Ant1	0.10	-4.169			
802.11n(HT20)	2412	Ant0	0.11	-6.991	-3.796	8	Pass
802.11n(HT20)	2412	Ant1	0.11	-6.629			
802.11n(HT20)	2437	Ant0	0.11	-7.427	-4.006	8	Pass
802.11n(HT20)	2437	Ant1	0.11	-6.641			
802.11n(HT20)	2462	Ant0	0.13	-7.464	-3.896	8	Pass
802.11n(HT20)	2462	Ant1	0.11	-6.412			
802.11n(HT40)	2422	Ant0	0.26	-12.091	-8.874	8	Pass
802.11n(HT40)	2422	Ant1	0.22	-11.687			
802.11n(HT40)	2437	Ant0	0.22	-12.402	-9.070	8	Pass
802.11n(HT40)	2437	Ant1	0.22	-11.780			
802.11n(HT40)	2452	Ant0	0.22	-12.218	-9.092	8	Pass
802.11n(HT40)	2452	Ant1	0.22	-11.990			

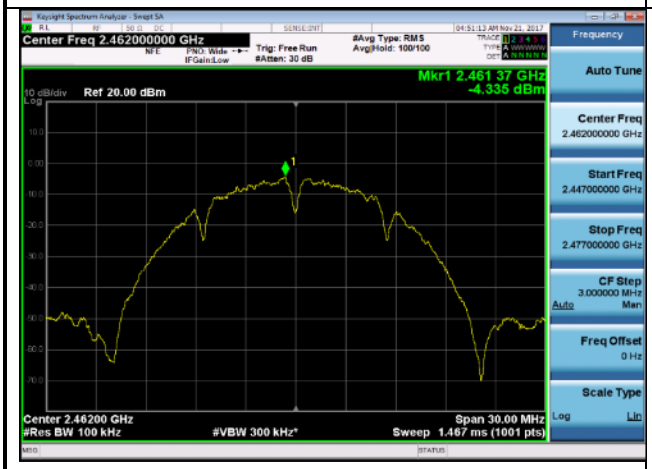
5.2 Test Plots

Power spectral density：802.11b,2412MHz,Ant1

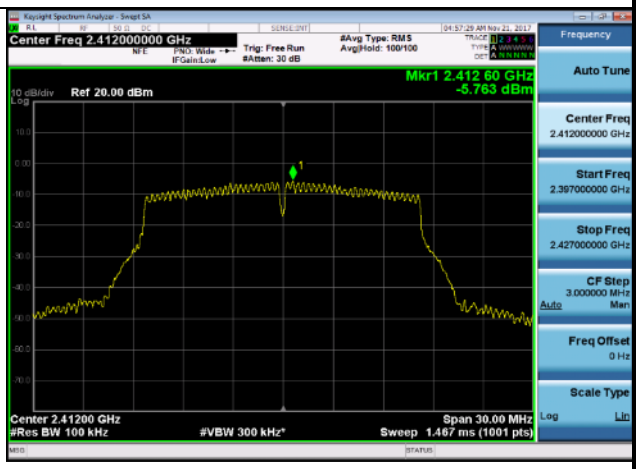
Power spectral density：802.11b,2437MHz,Ant1



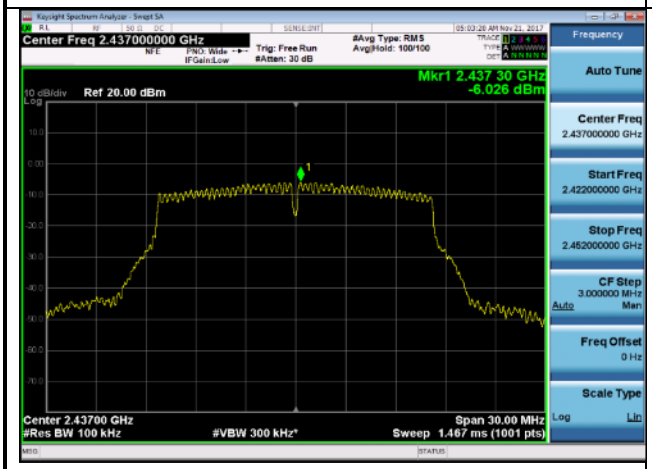
Power spectral density：802.11b,2462MHz,Ant1



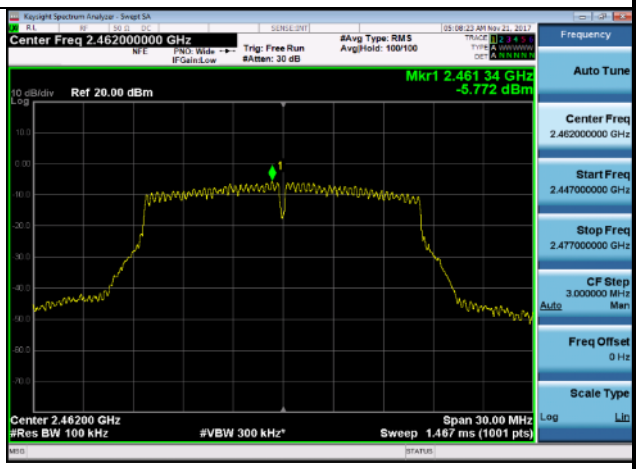
Power spectral density：802.11g,2412MHz,Ant1

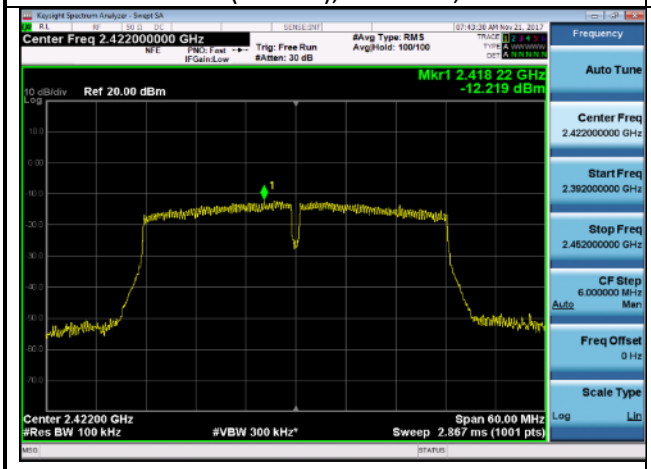
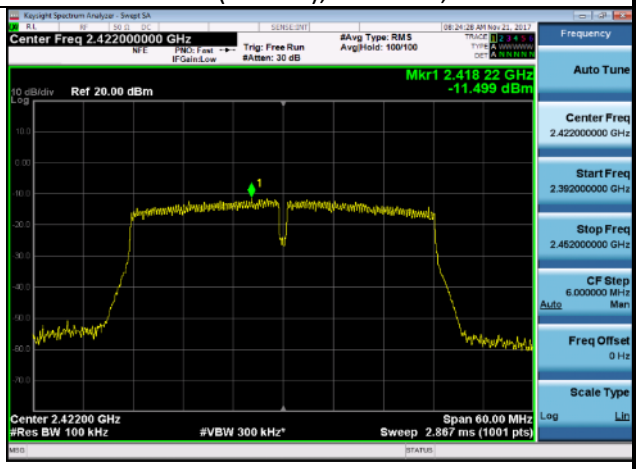
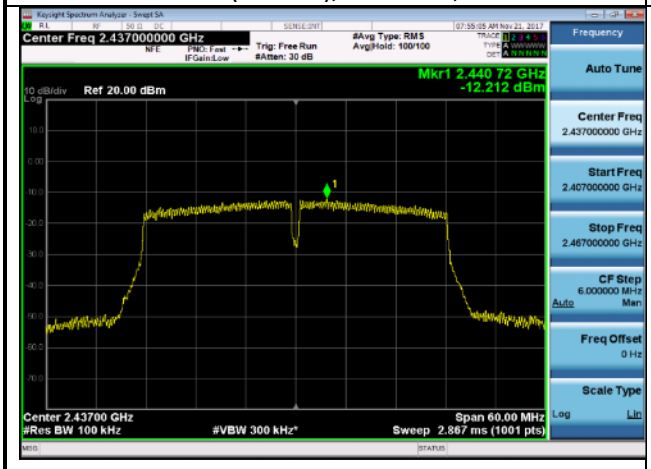
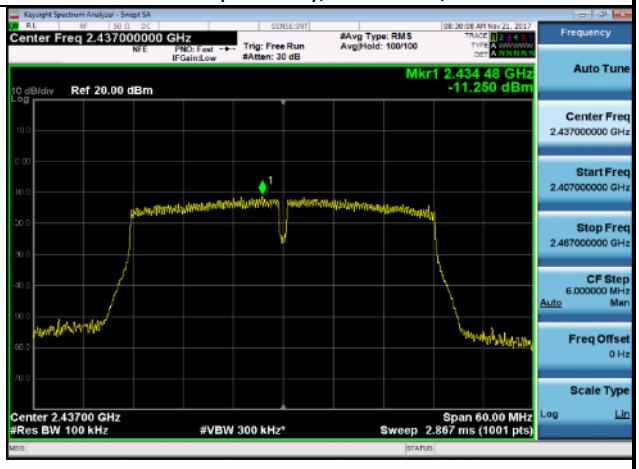


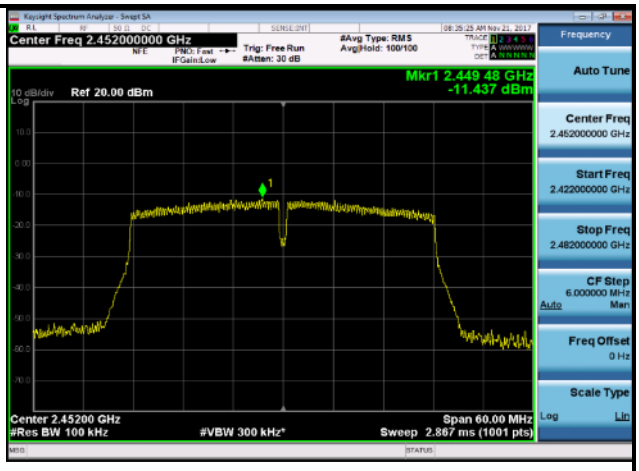
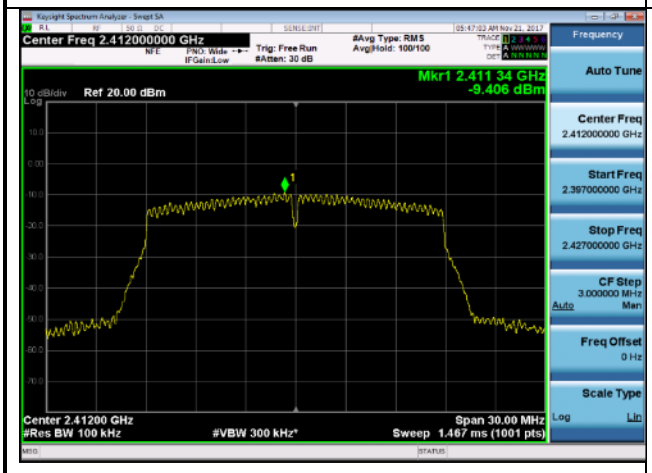
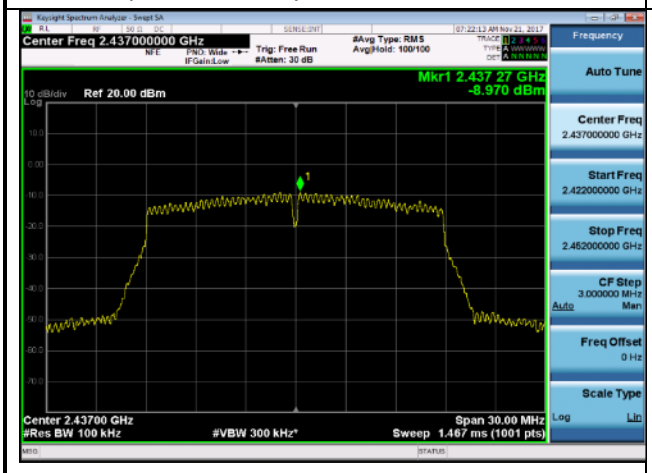
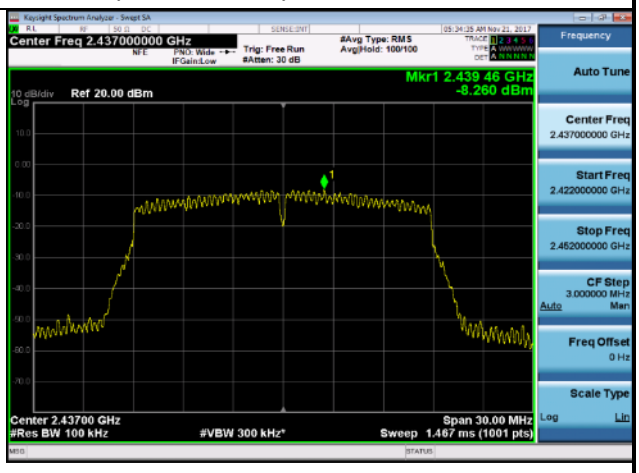
Power spectral density：802.11g,2437MHz,Ant1

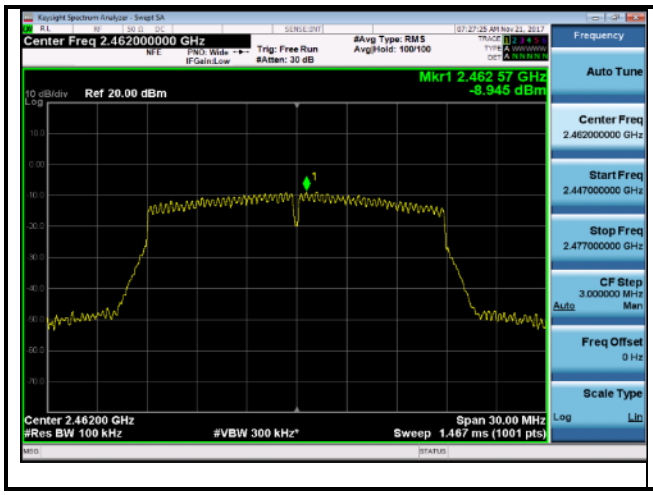


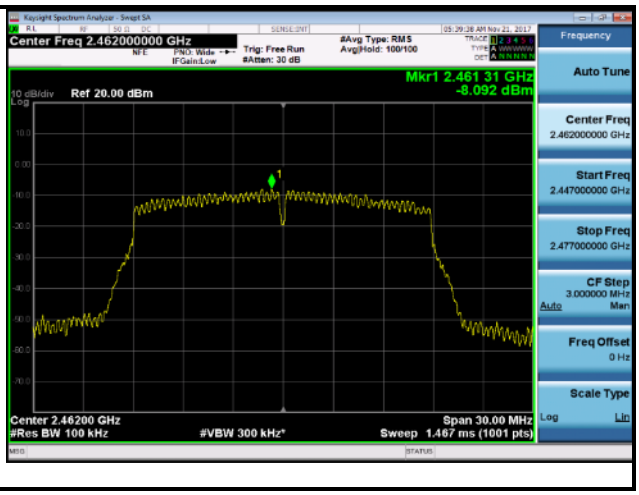
Power spectral density：802.11g,2462MHz,Ant1



Power spectral density： 802.11n(40MHz),2422MHz,Ant0	Power spectral density： 802.11n(40MHz),2422MHz,Ant1
	
Power spectral density： 802.11n(40MHz),2437MHz,Ant0	Power spectral density： 802.11n(40MHz),2437MHz,Ant1
	
Power spectral density： 802.11n(40MHz),2452MHz,Ant0	Power spectral density： 802.11n(40MHz),2452MHz,Ant1

	
Power spectral density：802.11n,2412MHz,Ant0	Power spectral density：802.11n,2412MHz,Ant1
	
Power spectral density：802.11n,2437MHz,Ant0	Power spectral density：802.11n,2437MHz,Ant1
	
Power spectral density：802.11n,2462MHz,Ant0	Power spectral density：802.11n,2462MHz,Ant1


Center Freq 2.462000000 GHz
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
Mkr1 2.462 57 GHz
-8.945 dBm
10 dB/div
Ref 20.00 dBm
Center 2.46200 GHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 30.00 MHz
Sweep 1.467 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.447000000 GHz
Stop Freq
2.477000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin


Center Freq 2.462000000 GHz
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
Mkr1 2.461 31 GHz
-8.092 dBm
10 dB/div
Ref 20.00 dBm
Center 2.46200 GHz
#Res BW 100 kHz
#VBW 300 kHz*
Span 30.00 MHz
Sweep 1.467 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.447000000 GHz
Stop Freq
2.477000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

6. Emission outside the frequency band

6.1 Test Data

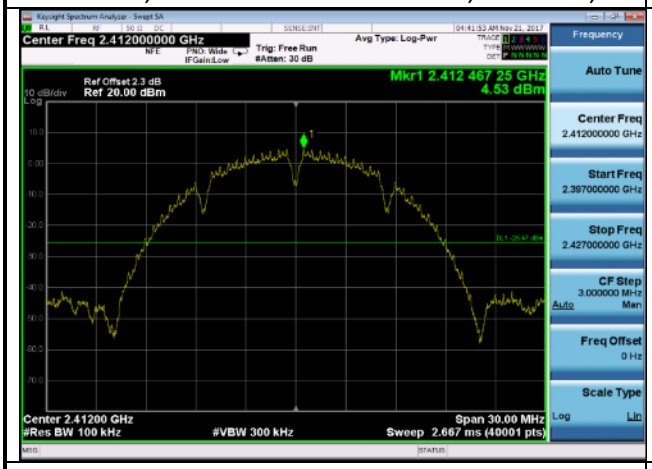
WLAN Transmitter Spurious Emission					
Mode	Test Frequency(MHz)	Test No.	Frequency Range	Power(dBm)	Result
802.11b	2412	1	Reference Level	4.53	Pass
802.11b	2412	2	Band Edge	-41.13	Pass
802.11b	2412	3	1MHz~2310MHz	-56.00	Pass
802.11b	2412	4	2500MHz~5000MHz	-47.00	Pass
802.11b	2412	5	5000MHz~25000MHz	-43.00	Pass
802.11b	2437	1	Reference Level	4.65	Pass
802.11b	2437	2	Band Edge	-56.02	Pass
802.11b	2437	3	1MHz~2310MHz	-56.00	Pass
802.11b	2437	4	2500MHz~5000MHz	-49.00	Pass
802.11b	2437	5	5000MHz~25000MHz	-42.00	Pass
802.11b	2462	1	Reference Level	4.64	Pass
802.11b	2462	2	Band Edge	-55.23	Pass
802.11b	2462	3	1MHz~2310MHz	-55.00	Pass
802.11b	2462	4	2500MHz~5000MHz	-49.00	Pass
802.11b	2462	5	5000MHz~25000MHz	-42.00	Pass
802.11g	2412	1	Reference Level	4.79	Pass
802.11g	2412	2	Band Edge	-29.96	Pass
802.11g	2412	3	1MHz~2310MHz	-54.00	Pass
802.11g	2412	4	2500MHz~5000MHz	-51.00	Pass
802.11g	2412	5	5000MHz~25000MHz	-42.00	Pass
802.11g	2437	1	Reference Level	4.90	Pass
802.11g	2437	2	Band Edge	-54.61	Pass
802.11g	2437	3	1MHz~2310MHz	-55.00	Pass
802.11g	2437	4	2500MHz~5000MHz	-53.00	Pass
802.11g	2437	5	5000MHz~25000MHz	-42.00	Pass
802.11g	2462	1	Reference Level	4.66	Pass

802.11g	2462	2	Band Edge	-44.29	Pass
802.11g	2462	3	1MHz~2310MHz	-54.00	Pass
802.11g	2462	4	2500MHz~5000MHz	-53.00	Pass
802.11g	2462	5	5000MHz~25000MHz	-42.00	Pass
802.11n(HT20)	2412	1	Reference Level	1.75	Pass
802.11n(HT20)	2412	2	Band Edge	-34.48	Pass
802.11n(HT20)	2412	3	1MHz~2310MHz	-55.00	Pass
802.11n(HT20)	2412	4	2500MHz~5000MHz	-53.00	Pass
802.11n(HT20)	2412	5	5000MHz~25000MHz	-42.00	Pass
802.11n(HT20)	2437	1	Reference Level	1.88	Pass
802.11n(HT20)	2437	2	Band Edge	-55.22	Pass
802.11n(HT20)	2437	3	1MHz~2310MHz	-53.00	Pass
802.11n(HT20)	2437	4	2500MHz~5000MHz	-53.00	Pass
802.11n(HT20)	2437	5	5000MHz~25000MHz	-42.00	Pass
802.11n(HT20)	2462	1	Reference Level	2.23	Pass
802.11n(HT20)	2462	2	Band Edge	-46.92	Pass
802.11n(HT20)	2462	3	1MHz~2310MHz	-56.00	Pass
802.11n(HT20)	2462	4	2500MHz~5000MHz	-53.00	Pass
802.11n(HT20)	2462	5	5000MHz~25000MHz	-42.00	Pass
802.11n(HT40)	2422	1	Reference Level	0.08	Pass
802.11n(HT40)	2422	2	Band Edge	-35.41	Pass
802.11n(HT40)	2422	3	1MHz~2310MHz	-45.00	Pass
802.11n(HT40)	2422	4	2500MHz~5000MHz	-53.00	Pass
802.11n(HT40)	2422	5	5000MHz~25000MHz	-42.00	Pass
802.11n(HT40)	2437	1	Reference Level	0.21	Pass
802.11n(HT40)	2437	2	Band Edge	-39.58	Pass
802.11n(HT40)	2437	3	1MHz~2310MHz	-45.00	Pass
802.11n(HT40)	2437	4	2500MHz~5000MHz	-53.00	Pass
802.11n(HT40)	2437	5	5000MHz~25000MHz	-42.00	Pass
802.11n(HT40)	2452	1	Reference Level	0.43	Pass

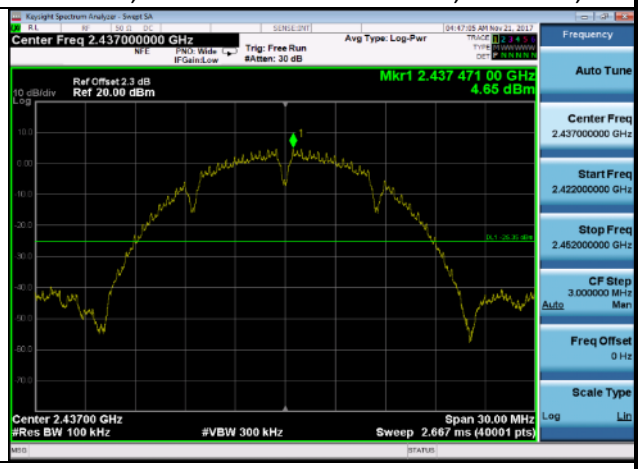
802.11n(HT40)	2452	2	Band Edge	-37.58	Pass
802.11n(HT40)	2452	3	1MHz~2310MHz	-45.00	Pass
802.11n(HT40)	2452	4	2500MHz~5000MHz	-53.00	Pass
802.11n(HT40)	2452	5	5000MHz~25000MHz	-42.00	Pass

9.2 Test Plots

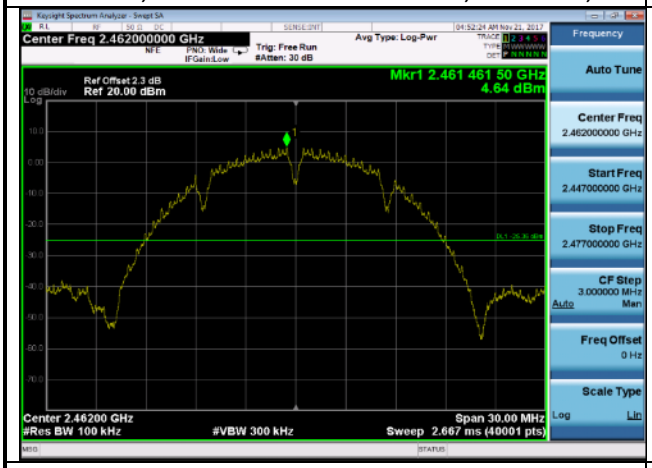
Case 1,Reference Level：802.11b,2412MHz,



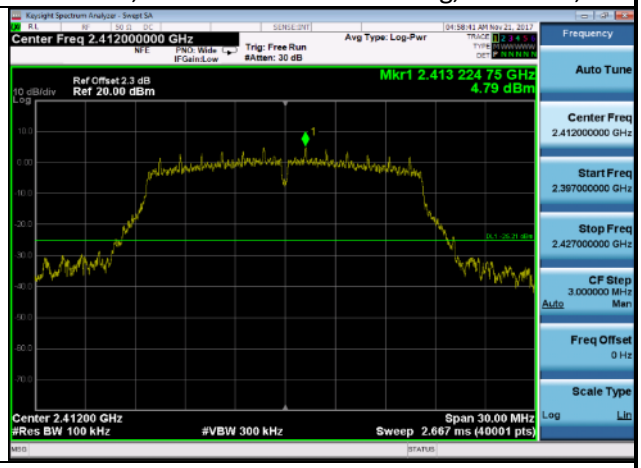
Case 1,Reference Level：802.11b,2437MHz,



Case 1,Reference Level：802.11b,2462MHz,

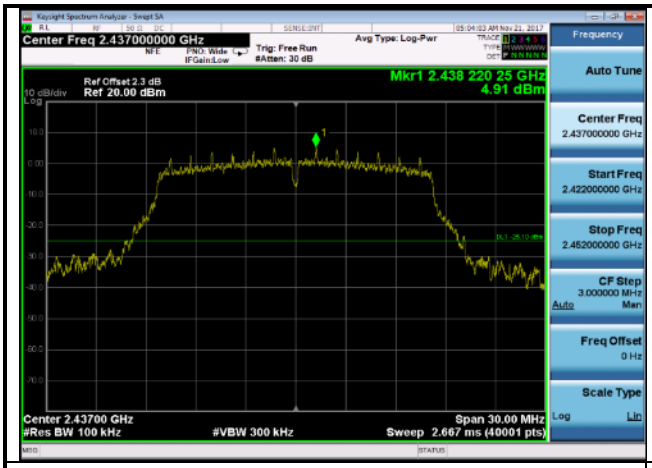
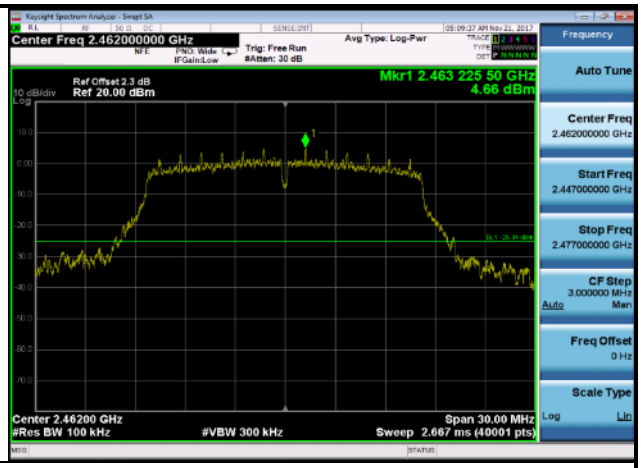
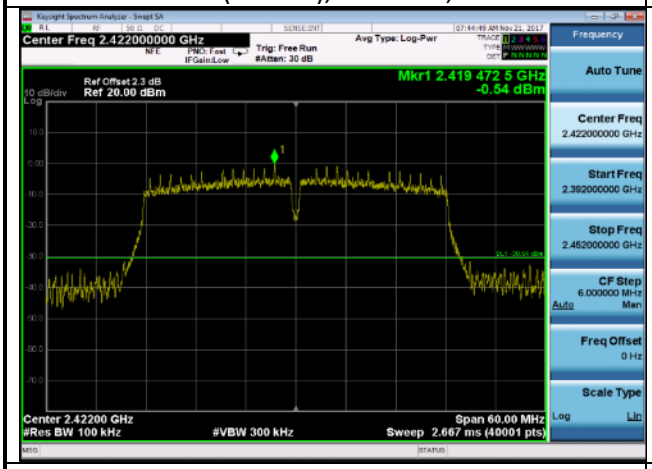
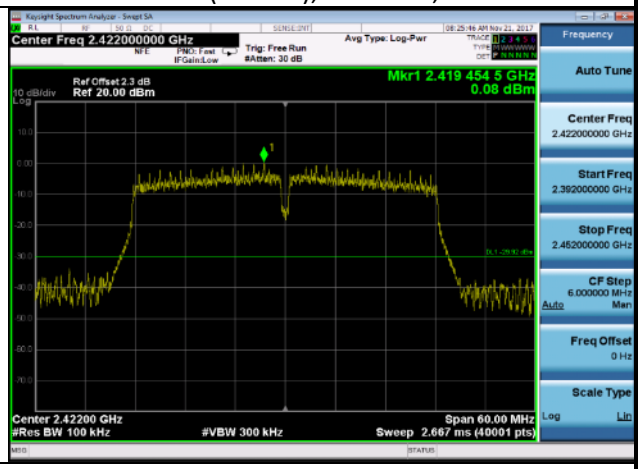
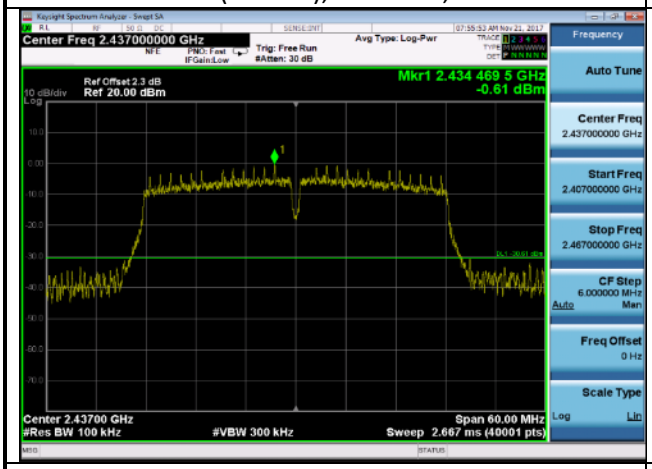
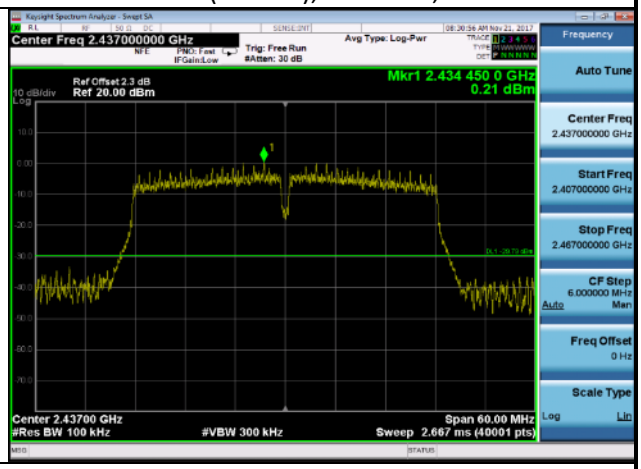


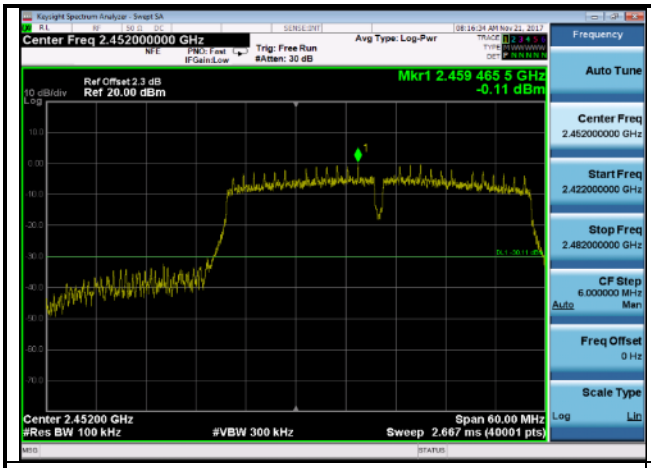
Case 1,Reference Level：802.11g,2412MHz,



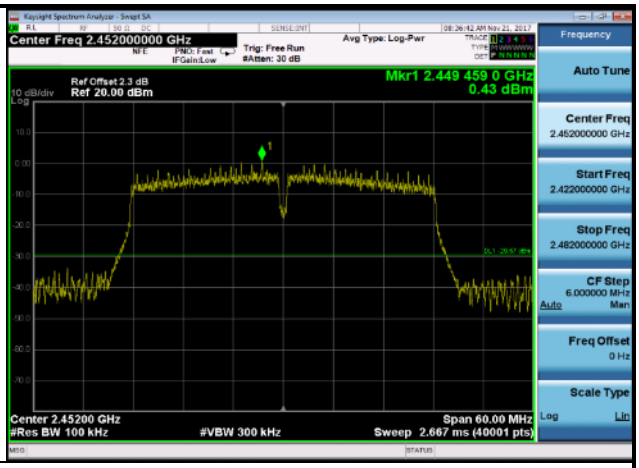
Case 1,Reference Level：802.11g,2437MHz,

Case 1,Reference Level：802.11g,2462MHz,

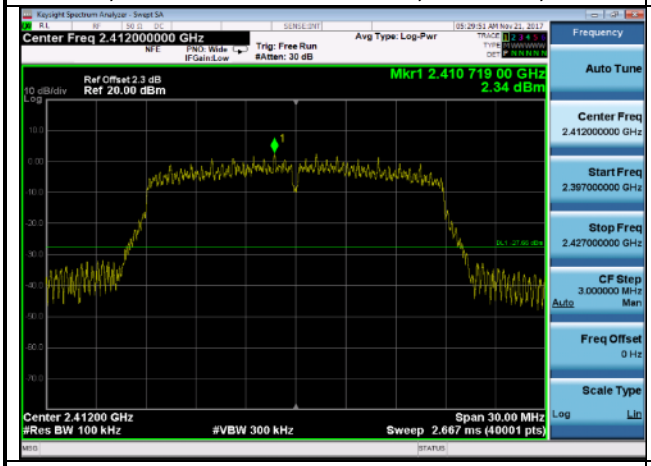
	
Case 1,Reference Level： 802.11n(40MHz),2422MHz,ANT 1	Case 1,Reference Level： 802.11n(40MHz),2422MHz, ANT 0
	
Case 1,Reference Level： 802.11n(40MHz),2437MHz, ANT 1	Case 1,Reference Level： 802.11n(40MHz),2437MHz, ANT 0
	
Case 1,Reference Level： 802.11n(40MHz),2452MHz, ANT 1	Case 1,Reference Level： 802.11n(40MHz),2452MHz, ANT 0



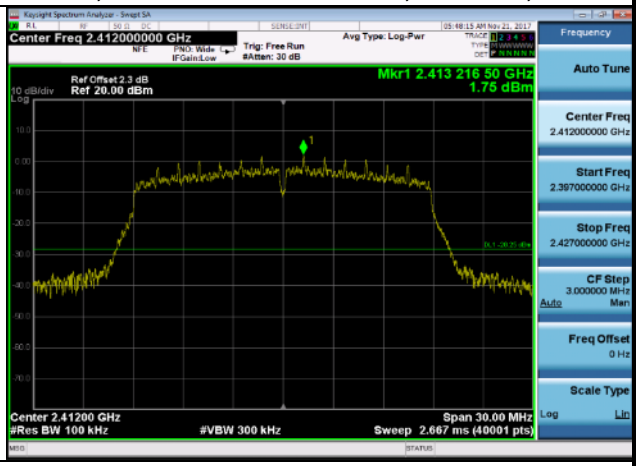
Case 1,Reference Level: 802.11n,2412MHz, ANT 1



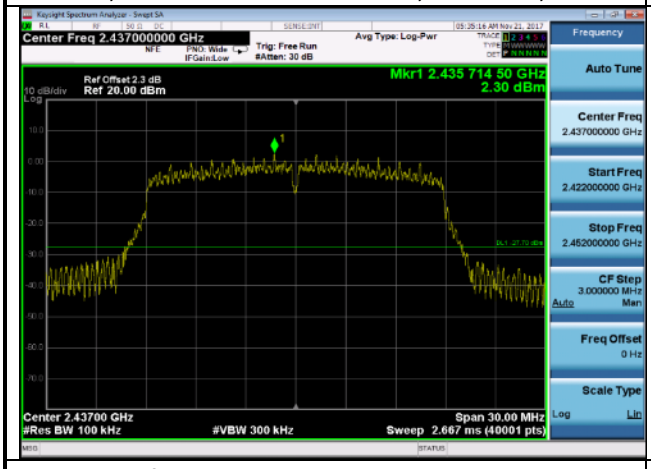
Case 1,Reference Level: 802.11n,2412MHz, ANT 0



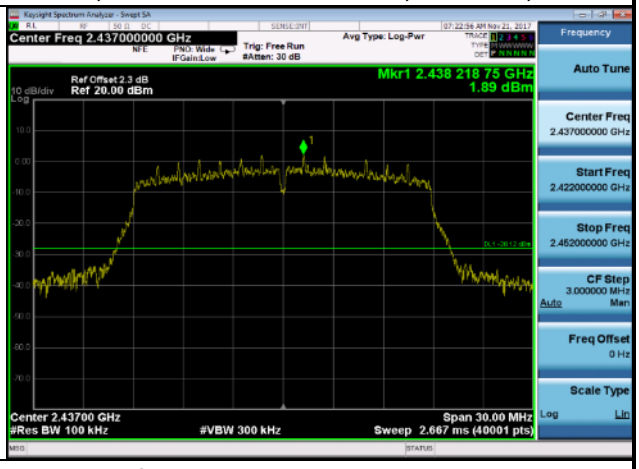
Case 1,Reference Level: 802.11n,2437MHz, ANT 1



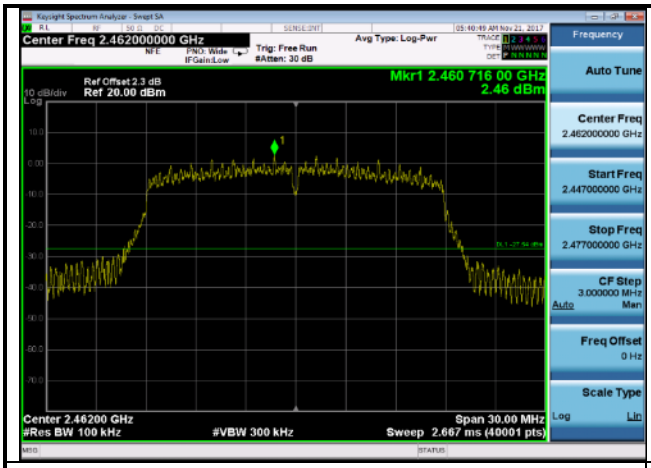
Case 1,Reference Level: 802.11n,2437MHz, ANT 0



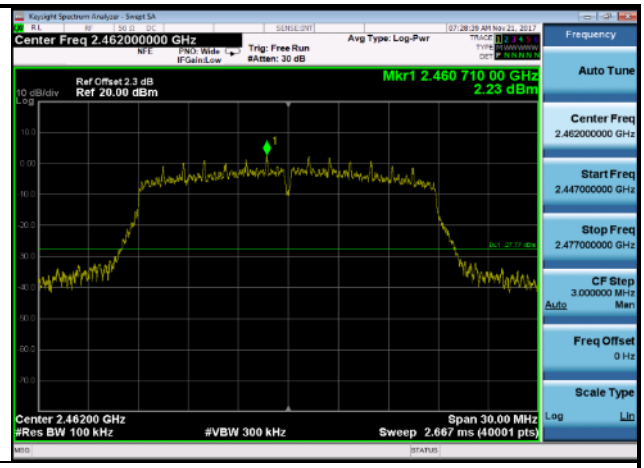
Case 1,Reference Level: 802.11n,2462MHz, ANT 1



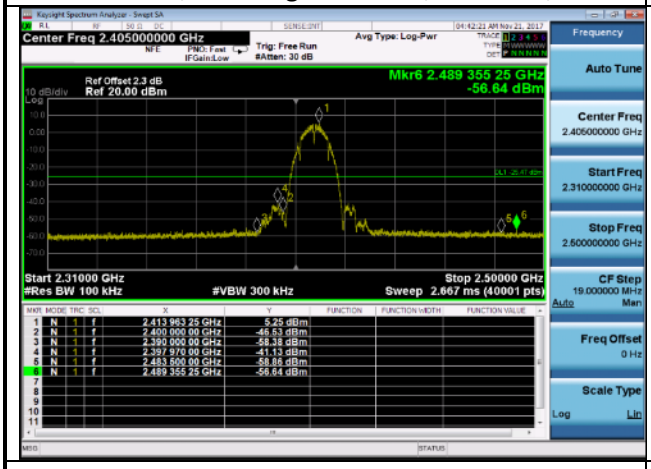
Case 1,Reference Level: 802.11n,2462MHz, ANT 0



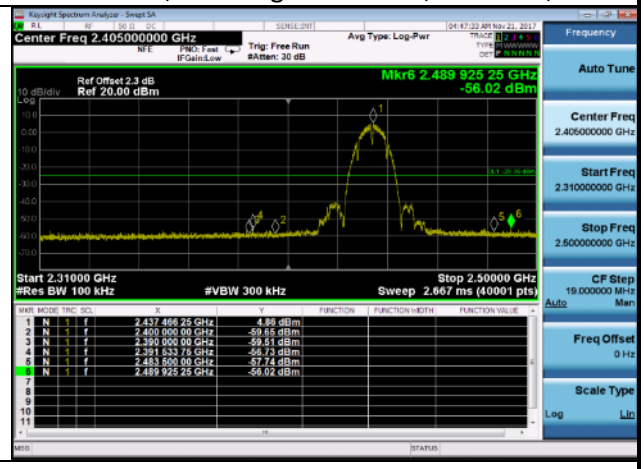
Case 2,Band Edge: 802.11b,2412MHz,



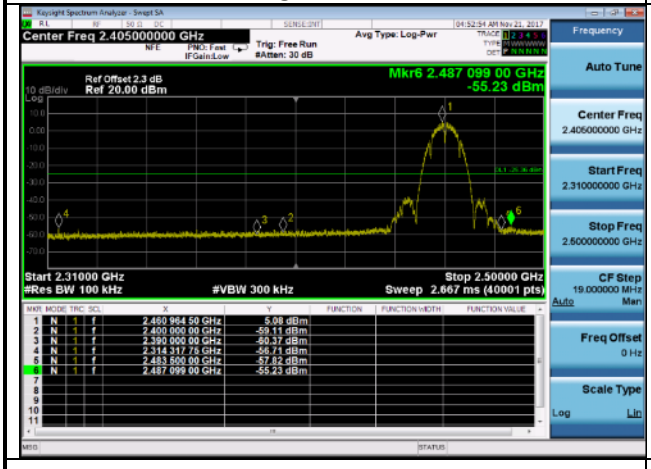
Case 2,Band Edge：802.11b,2437MHz,



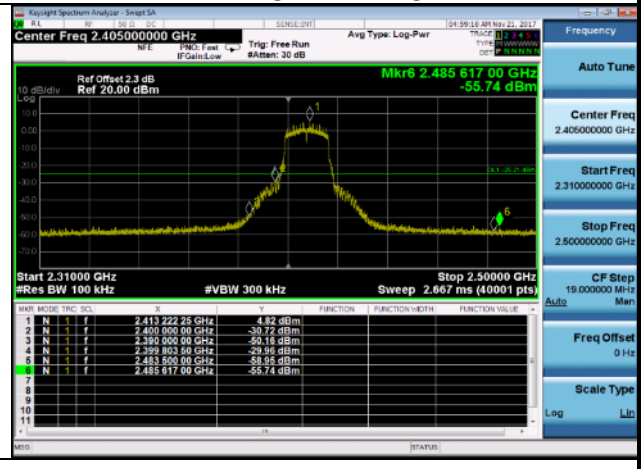
Case 2,Band Edge：802.11b,2462MHz,



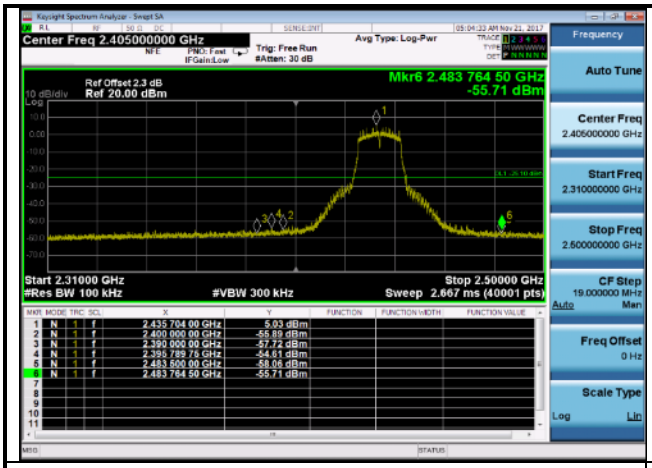
Case 2,Band Edge：802.11g,2412MHz,



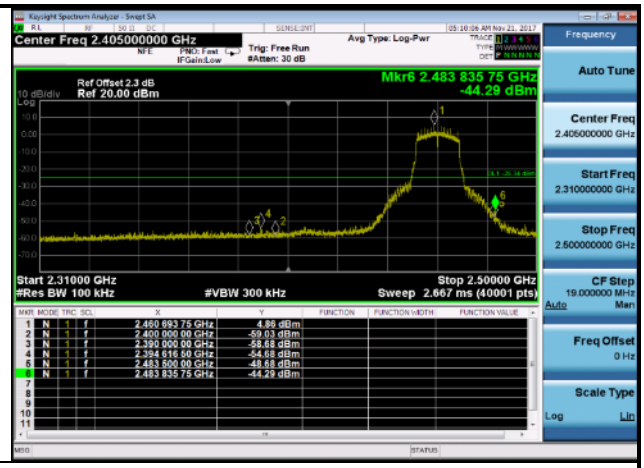
Case 2,Band Edge：802.11g,2437MHz,



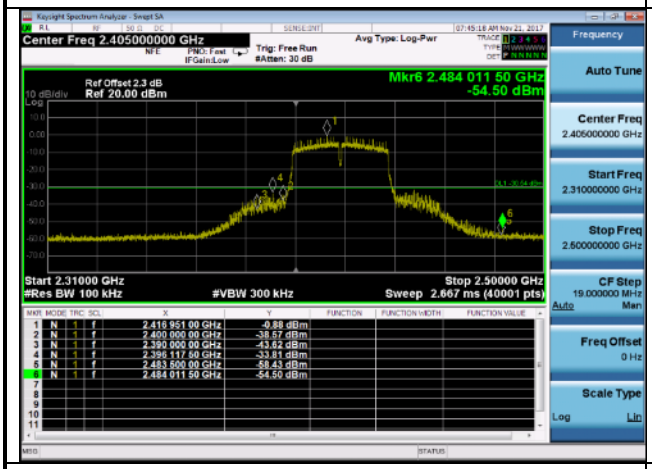
Case 2,Band Edge：802.11g,2462MHz,



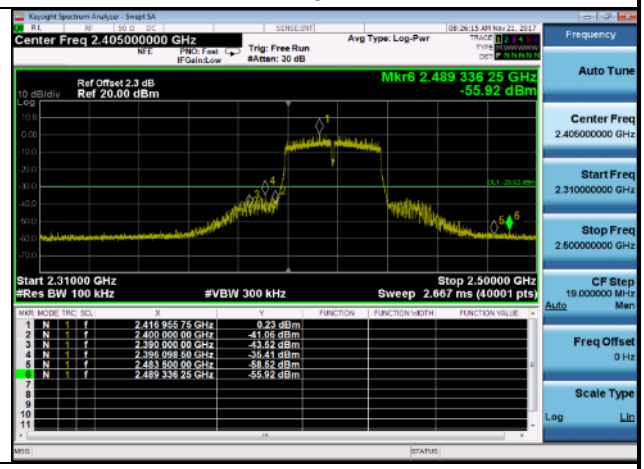
Case 2,Band Edge：802.11n(40MHz),2422MHz,



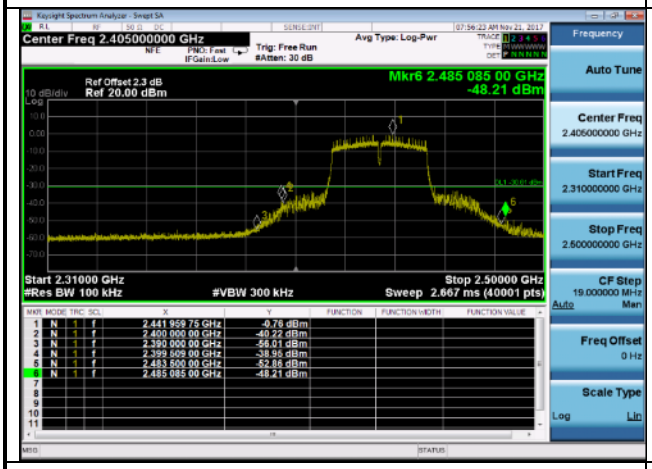
Case 2,Band Edge:802.11n(40MHz),2422MHz, ANT 0



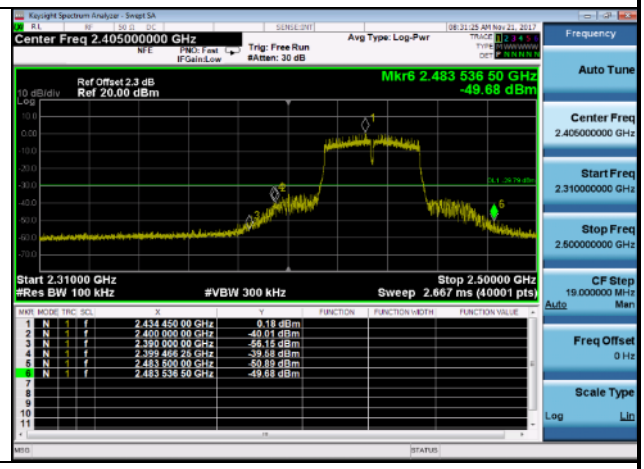
Case 2,Band Edge：802.11n(40MHz),2437MHz,



Case 2,Band Edge：802.11n(40MHz),2437MHz, ANT 0



Case 2,Band Edge：802.11n(40MHz),2452MHz,



Case 2,Band Edge：802.11n(40MHz),2452MHz, ANT 0